

01-20-04



PATENT APPLICATION
48930-01702

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In Re the Application of: | Richard L. Bonkowski, et al. |) |
| | |) |
| Serial No.: | 10/688,357 |) Art Unit |
| | |) |
| Filed: | October 17, 2003 |) |
| | |) |
| For: | SECURITY ARTICLES HAVING |) |
| | DIFFRACTIVE SURFACES AND |) |
| | COLOR SHIFTING BACKGROUNDS |) |
| | |) |
| Examiner: | Unknown |) |
| | |) |

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08A be considered by the Examiner and made of record. Copies of all documents are not enclosed as they can be found in the parent applications. In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56(b) exists.

To the extent any additional fees are due in connection with this communication,
Applicants request that they be withdrawn from Deposit Account No. 082665.

DATED this 16th day of January, 2004.

Respectfully submitted,



David O. Seeley, Reg. No. 30,148
Customer No. 34013
Holme Roberts & Owen LLP
299 South Main Street, Suite 1800
Salt Lake City, Utah 84111
(801) 521-5800

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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| Application Number | 10/688,357 |
| Filing Date | October 17, 2003 |
| First Named Inventor | Richard L. Bonkowski |
| Art Unit | Unknown |
| Examiner Name | Unknown |
| Attorney Docket Number | 48930-01702 |

U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|--|--------------|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | | |
| | 1 | US- | 3,011,383 | 12/1961 | Sylvester, et al. | |
| | 2 | US- | 4,756,771 | 07/12/88 | Brodalla, et al. | |
| | 3 | US- | 4,779,898 | 10/25/88 | Berning, et al. | |
| | 4 | US- | 5,002,312 | 3/26/91 | Phillips, et al. | |
| | 5 | US- | 5,009,486 | 04/23/91 | Dobrowolski, et al. | |
| | 6 | US- | 5,084,351 | 01/28/92 | Phillips, et al. | |
| | 7 | US- | 5,171,363 | 12/15/92 | Phillips, et al. | |
| | 8 | US- | 5,364,467 | 11/15/94 | Schmid, et al. | |
| | 9 | US- | 5,648,165 | 07/15/97 | Phillips, et al. | |
| | 10 | US- | 5,650,248 | 07/22/97 | Miekka, et al. | |
| | 11 | US- | 5,763,086 | 06/09/98 | Schmid, et al. | |
| | 12 | US- | 5,858,078 | 01/12/99 | Andes, et al. | |
| | 13 | US- | 5,912,767 | 06/15/99 | Lee | |
| | 14 | US- | 5,989,626 | 11/23/99 | Coombs, et al. | |
| | 15 | US- | 6,013,370 | 01/11/00 | Coulter, et al. | |
| | 16 | US- | 6,045,230 | 04/04/00 | Dreyer, et al. | |
| | 17 | US- | 6,068,691 | 05/30/00 | Miekka, et al. | |
| | 18 | US- | 6,112,388 | 09/05/00 | Kimoto, et al. | |
| | 19 | US- | 6,168,100 B1 | 01/02/01 | Kato, et al. | |
| | 20 | US | 6,241,858 B1 | 06/05/01 | Phillips, et al. | |

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| | 21 | DE 43 43 387 | 06/25/95 | | | <input type="checkbox"/> |
| | 22 | EP 0 756 945 | 02/05/97 | | | <input type="checkbox"/> |
| | 23 | WO 00/08596 | 02/17/00 | | | <input type="checkbox"/> |
| | 24 | WO 98/12583 | 03/26/98 | | | <input type="checkbox"/> |
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| First Named Inventor | Richard L. Bonkowski |
| Art Unit | Unknown |
| Examiner Name | Unknown |
| Attorney Docket Number | 48930-01702 |

Sheet **2** of **5****U.S. PATENT DOCUMENTS**

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| | 25 | US- | 4,066,280 | 01/03/78 | LaCapria | |
| | 26 | US- | 4,126,373 | 11/21/78 | Moraw | |
| | 27 | US- | 4,155,627 | 05/22/79 | Gale, et al. | |
| | 28 | US- | 4,168,983 | 09/25/79 | Vittands, et al. | |
| | 29 | US- | 4,930,866 | 06/05/90 | Berning, et al. | |
| | 30 | US- | 5,009,486 | 04/23/91 | Dobrowolski, et al. | |
| | 31 | US- | 5,106,125 | 04/21/92 | Antes | |
| | 32 | US- | 5,214,530 | 05/25/93 | Coombs, et al. | |
| | 33 | US- | 5,254,390 | 10/1993 | Shih-Lai Lu | |
| | 34 | US- | 5,339,737 | 08/23/94 | Lewis, et al. | |
| | 35 | US | 5,464,710 | 11/07/95 | Yang | |
| | 36 | US- | 5,549,953 | 08/1996 | Li Li | |
| | 37 | US- | 5,591,527 | 01/1997 | Shih-Lai Lu | |
| | 38 | US- | 5,700,550 | 12/23/97 | Uyama, et al. | |
| | 39 | US- | 5,856,048 | 01/1999 | Tahara, et al. | |
| | 40 | US- | 6,031,457 | 02/29/00 | Bonkowski, et al. | |
| | 41 | US- | 6,150,022 | 11/2000 | Coulter, et al. | |
| | 42 | US- | 6,157,489 | 12/05/00 | Bradley, Jr., et al. | |
| | 43 | US- | 6,242,510 B1 | 06/05/01 | Killey | |
| | 44 | US- | 6,243,204 B1 | 06/05/01 | Bradley, Jr., et al. | |

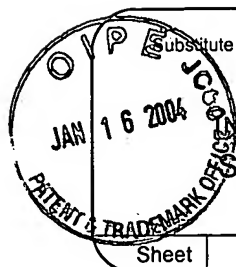
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| | 45 | US- | Re.35,512 | 05/20/97 | Nowak, et al. | |
| | 46 | US- | 4,168,983 | 09/25/79 | Vittands, et al. | |
| | 47 | US- | 4,434,010 | 02/28/84 | Ash | |
| | 48 | US- | 4,705,300 | 11/10/87 | Berning, et al. | |
| | 49 | US- | 4,705,356 | 11/10/87 | Berning, et al. | |
| | 50 | US- | 4,721,217 | 01/26/88 | Phillips, et al. | |
| | 51 | US- | 4,838,648 | 06/13/89 | Phillips, et al. | |
| | 52 | US- | 5,059,245 | 10/22/91 | Phillips, et al. | |
| | 53 | US- | 5,084,351 | 01/28/92 | Phillips, et al. | |
| | 54 | US- | 5,135,812 | 08/04/92 | Phillips, et al. | |
| | 55 | US | 5,171,363 | 12/15/92 | Phillips, et al. | |
| | 56 | US- | 5,278,590 | 01/11/94 | Phillips, et al. | |
| | 57 | US- | 5,279,657 | 01/18/94 | Phillips, et al. | |
| | 58 | US- | 5,549,774 | 08/27/96 | Miekka, et al. | |
| | 59 | US- | 5,571,624 | 11/05/96 | Phillips, et al. | |
| | 60 | US- | 5,624,076 | 04/29/97 | Miekka, et al. | |
| | 61 | US- | 5,629,068 | 05/13/97 | Miekka, et al. | |
| | 62 | US- | 5,672,410 | 09/30/97 | Miekka, et al. | |
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Sheet 4 of 5

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| Art Unit | Unknown |
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NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | |
|--------------------|-----------------------|---|--|
| | 63 | John M. McKiernan, et al., "Luminescence and Laser Action of Coumarin Dyes Doped in Silicate and Aluminosilicate Glasses Prepared by the Sol-Gel Technique," Journal of Inorganic and Organometallic Polymers, Vol. 1, No. 1, 1991, pages 87-103. | |
| | 64 | Jeffery I. Zink, et al., "Optical Probes and Properties of Aluminosilicate Glasses Prepared By The Sol-Gel Method," Polym. Mater. Sci. Eng., pages 204-208 (1989). | |
| | 65 | Don W. Tomkins, Kurz Hastings, "Transparent Overlays for Security Printing and Plastic ID Cards," Pages 1-8, November, 1997. | |
| | 66 | The Mearl Corporation brochure for "Mearl Iridescent Film," Peekskill, NY. | |
| | 67 | J.A. Dobrowolski; K.M. Baird; P.D. Carman; and A. Waldorf, "Optical Interference Coatings for Inhibiting of Counterfeiting," Optica Acta, 1973, Vol. 20, No. 12, 925-937. | |
| | 68 | The R.D. Mathis Company Manual for "Thin Film Evaporation Source Reference," Long Beach, CA. | |
| | 69 | Minolta Manual for "Precise Color Communication, Color Control From Feeling to Instrumentation," Pages 18, 20, 22, 23, 46, 47, 48 and 49. | |
| | 70 | Frans Defilet, LGZ Landis & Gyr Zug Corporation, "Kinegrams 'Optical Variable Devices' (OVD's) For Banknotes, Security Documents and Plastic Cards," San Diego, April 1-3, 1987 | |
| | 71 | S.P. McGrew, "Hologram Counterfeiting: Problems and Solutions," SPIE, Volume 1210 Optical Security and Anticounterfeiting Systems, 1990, Pages 66-76. | |
| | 72 | Rudolf L. van Renesse, "Security Design of Valuable Documents and Products," SPIE, Vol. 2659, June 1996, Pages 10-20. | |
| | 73 | Steve McGrew, "Countermeasures Against Hologram Counterfeiting," Internet site www.iea.com/nli/publications/countermeasures.htm , January 6, 2000. | |
| | 74 | Roger W. Phillips, "Optically Variable Films, Pigments, and Inks," SPIE Vol. 1323, Optical Thin Films III: New Developments, 1990, Pages 98-109. | |
| | 75 | Roger W. Phillips, and Anton F. Bleikolm, "Optical Coatings for Document Security," Applied Optics, Vol. 35, No. 28, October 1, 1996, Pages 5529-5534. | |

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Sheet 5 of 5

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| | |) |
| Examiner: | Unknown |) |

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Nancy Flannigan
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Holme Roberts & Owen LLP
299 South Main Street, Suite 1800
Salt Lake City, Utah 84111
(801) 521-5800